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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/833,452 | 04/12/2001 | Randall Allen Vogel | AD6728 US NA | 3330 |

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E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
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WILMINGTON, DE 19805

EXAMINER

JACKSON, MONIQUE R

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1773

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/833,452

Applicant(s)

VOGEL ET AL.

Examiner

Monique R. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,6,7,9,11,12,14,16-18,20,21,43,45,47,49,54-81,83 and 84 is/are pending in the application.
- 4a) Of the above claim(s) 4,7,9,11,12,14,16-18,20,21,45,47,49 and 81 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,6,43,54-80,83 and 84 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. The amendment filed 4/28/06 has been entered. Claims 1, 3, 4, 6, 7, 9, 11, 12, 14, 16-18, 20-21, 43, 45, 47, 49, 54-81 and 83-84 are pending in the application. Claims 4, 7, 9, 11, 12, 14, 16-18, 20-21, 45, 47, 49 and 81 are withdrawn from consideration as being directed to non-elected species.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claims 1, 3, 6, 43, 56-57, 60-61, 64, 66-67, 73-74, 77 and 83-84 are rejected under 35 U.S.C. 102(b) as being anticipated by Fanselow et al for the reasons recited previously and restated below.

Fanselow et al teach a coextruded multilayered film comprising a core layer of soft thermoplastic polymer such as ethylene copolymers including blends with ionomers (*now reads upon the second coextruded layer*), sandwiched between outer and inside surface layers wherein in preferred embodiments the inside surface layer is an ionomeric copolymer with a copolymer of ethylene and methacrylic acid-metal cation salt being particularly suitable (*reads upon the 1st coextruded surface layer*), and wherein in particularly preferred embodiments the core layer is composed of ethylene-vinyl acetate, ethylene-butene copolymer, ethylene methacrylate copolymer, ionomer and combinations thereof (Abstract; Col. 4, lines 23-50; Col. 5, lines 1-3; Col. 11, lines 7-15.) Fanselow et al teach that the film may be clear, opaque or colored and that any one or all of the layers may be provided with pigments or dyes as desired (Col. 6, lines 34-37 and Col. 13, lines 12-15.) Fanselow et al specifically teach an example comprising a trilayer

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coextruded film comprising a **surface layer of a SURLYN ionomeric resin** coextruded with a core layer comprising a SURYLN/EMAC resin blend and an outer surface layer of EMAC (Example 18.) Faselow et al teach that the film may be laminated to itself or a second like film to produce a film based assembly that may then be bonded to connective or other performing parts (Col. 13, line 60-Col. 14, line 23.) Faselow et al further teach that the coextruded film and layers have thickness ranges that read upon the instantly claimed ranges and considering the multilayer films are produced by coextrusion to form a unitary film, the Examiner takes the position that “the flow properties” of the layers are inherently “matched” as instantly claimed (Col. 11, line 60-Col. 12, line 16.)

4. Claims 1, 3, 43, 56, 60, 64, 66, 73, 77 and 83-84 are rejected under 35 U.S.C. 102(e) as being anticipated by Mientus et al for the reasons recited previously and restated below.

Mientus et al teach a coextruded, multilayered film comprising a thermoplastic core layer having a first side and a second side, the core layer (*equivalent to the 2nd coextruded layer*) comprising: a polyolefin having a density in the range of about 0.89 to about 0.97 grams per cubic centimeter; a second polymeric material selected from ionomers derived from sodium, lithium or zinc and an ethylene/methacrylic acid copolymer, and a combination thereof, and a light stabilizer, and is clear or pigmented; an abrasion and scuff resistant clear first thermoplastic skin layer overlying the first side of the core layer, and a clear second thermoplastic skin layer overlying the second side of the core layer, wherein the skin layers (*read upon the instantly claimed 1st coextruded surface layer*) are preferably ethylene/methacrylic acid copolymers; ethylene/acrylic acid copolymers; ethylene/methacrylic acid copolymers containing sodium, lithium or zinc (also referred to as ionomers); and mixtures of two or more thereof; and wherein

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the multilayered film may be laminated to a substrate such as a release liner or adhered to a car, truck, boat or the like (*reads upon the instantly claimed substrates*; Abstract; Col. 3, lines 22-62; Col. 5, lines 22-33; Col. 6, lines 6-46; Col. 7, lines 32-48; Col. 12, lines 19-29; Col. 37, lines 1-5.) Mientus et al teach specific examples comprising SURYLN skin layers (*reads upon the 1st coextruded layer*) sandwiching a core layer comprising a blend with SURLYN resin (*reads upon the instant second coextruded layer*) (Examples.) Mientus et al further teach that the coextruded film and layers have thickness ranges that read upon the instantly claimed ranges and considering the multilayer films are produced by coextrusion to form a unitary film, the Examiner takes the position that “the flow properties” of the layers are inherently “matched” as instantly claimed (Col. 13, lines 1-29.)

5. Claims 1, 3, 6, 43, 54-80, 83 and 84 are rejected under 35 U.S.C. 102(b) as being anticipated by Flieger (USPN 5,789,048) for the reasons recited in the prior office action and restated below.

Flieger teaches a film made from a random ionomer copolymer comprising 55-90% by weight ethylene and 10-45% by weight of an unsaturated monocarboxylic acid having 3-8 carbon atoms, preferably acrylic acid or methacrylic acid, the copolymer being neutralized from 0-40% with a metal ion such as lithium, sodium, magnesium, or zinc (Abstract; Col. 2, lines 41-53.) Flieger teaches that the film may be formed by any procedure known in the art including flat film extrusion and blown film extrusion and typically has a thickness of 70-125 microns, wherein the film may be formed of several coextruded layers, each layer providing different properties (Col. 2, lines 58-67.) Flieger specifically teaches that the film may be formed by a black inner layer for ultraviolet light protection, a white middle layer for appearance, and a clear

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outer layer for printability and tackiness wherein Fleiger includes an example comprising a multilayer film formed from an ionomer copolymer comprising 80% ethylene and 20% methacrylic acid neutralized 35% with sodium ions, coextruded to form a 120 micron bag comprising a black pigmented inner layer 40 microns thick, a white pigmented middle layer 40 microns thick and a transparent outer layer 20 microns thick (Col. 3, lines 1-5; Ex. 2.) With regards to the flow properties and optical properties as instantly claimed, considering the multilayer film taught by Fleiger is produced by coextrusion to form a unitary film, the Examiner takes the position that “the flow properties” of the layers are inherently “matched” as instantly claimed and further considering the clear outer or surface layer taught by Fleiger comprises the same ionomer material as instantly claimed produced by the same method, the DOI and gloss would inherently fall within the instantly claimed ranges.

Response to Arguments

6. It is noted that the Applicant did not provide any arguments with the amendment filed 4/28/06. Hence, the Applicant's arguments filed 1/31/06 with the non-responsive amendment have been fully considered but they are not persuasive. It is first noted that the arguments are directed to amendments that have not been made to the instant claims and hence are not applicable to the claims as instantly recited. However, the Examiner will attempt to assume the Applicant's arguments with respect to the instant claims and the cited prior art based on the arguments submitted previously as well as 1/31/06.

7. The claims as instantly recited are directed to a coextruded film comprising: a) a first co-extruded polymeric layer consisting essential of either an ionomer or an ionomer and an additive; and b) “a second co-extruded polymeric layer (1) selected from the group consisting of ionomer

and ionomer-polyamide blend or (2) selected from the group consisting of the combination of ionomer and an additive and the combination of ionomer-polyamide blend and an additive;” wherein the first co-extruded layer is a surface layer, and the second co-extruded layer is in contact with the first co-extruded layer. Hence, in summary the film **comprises**:

Table I. Summary of Invention as claimed

| Layer | Location | Layer Material |
|-------------------|---|--|
| First Coextruded | Surface | Consists essentially of: A. Ionomer B. Ionomer and additive(s) |
| Second Coextruded | In Contact with above First Coextruded, Surface Layer | Comprises: (given the lack of a limiting transitional phrase between “polymeric layer” and the Markush groups) A. Ionomer B. Ionomer-Polyamide Blend C. Ionomer and additive(s) D. Ionomer-PA and additive(s) |

8. With regards to the amendment filed 4/28/06, it is noted that the Applicant has now recited that the second co-extruded polymer layer may be selected from four different species presented in two different Markush groups, however, it is noted that the limitation as present in the amended claim does not exclude other materials from being incorporated into the second co-extruded polymer layer. In the Applicant’s arguments submitted on 1/31/06 the Applicant states

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that the claim now recite the transitional phrase “consisting of” and hence overcomes the rejections over Mientus and Fanselow. However, the Examiner respectfully disagrees because the instant claims as recited do not state that the layer is “consisting of” the recited materials, hereby excluding any other materials, but only utilizes the term “consisting of” with respect to the two Markush groups. Hence, the Examiner takes the position that in the absence of any limiting phrase or wording, the second co-extruded layer may be formed from any of four species A-D as shown in the table above, along with any other material or additives, wherein the term “the combination” also does not limit the layer to just those two recited components. Further, to help in comparing the instantly claimed invention with examples specifically recited in the prior art, the teachings of Fanselow, Mientus and Fleiger are summarized in the table below.

Table II. Summary of References

| Reference | Layer Structure | Layer Materials |
|-----------|-------------------|--|
| Fanselow | Coextruded ABC | A. Ionomer Surface Layer (reads on 1 st coextruded, surface layer) B. Ionomer/EMAC Core Layer (reads on 2 nd coextruded layer) C. EMAC Surface Layer |
| Meintus | Coextruded ABA | A. Ionomer Surface (reads on 1 st coextruded, surface layer) B. Ionomer-Polyolefin Blend (reads on 2 nd coextruded layer) C. Ionomer Surface (also reads on 1st coextruded layer) |
| Fleiger | Coextruded ABC | A. Black Pigmented Ionomer Surface (reads on 1 st coextruded) B. White Pigmented Ionomer Core (reads on 2 nd coextruded) C. Clear Ionomer Surface (also reads on 1 st coextruded) |

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9. Hence, as recited, the prior art references do anticipate the claimed invention as instantly recited. Further, the Examiner notes that even if the claims were amended to recite that the second coextruded layer consists of ionomer or ionomer and one or more of the additives recited, the invention taught by Fleiger would still read upon the claims because the second coextruded layer taught by Fleiger only contains ionomer and white pigment which falls within the claimed list of additives and hence reads upon the instant second coextruded layer. The Examiner has considered Applicant's remarks filed 1/31/06 with respect to Fleiger, however, the Examiner is unclear how the Applicant can argue that the clear outer layer taught by Fleiger appears not to be made from an ionomer when the example clearly shows that the entire film was formed from an ionomer copolymer comprising 80% ethylene and 20% methacrylic acid neutralized 35% with sodium ions coextruded to form a 120 micron bag wherein the inner layer included black pigment and the middle layer included white pigment while the outer layer remained transparent.

10. Therefore, the Examiner maintains her position that the instant invention is anticipated by the prior art for the reasons discussed above.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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Primary Examiner
Technology Center 1700
June 30, 2006